

REMARKS

The claims are claims 1 to 4, 7, 8, 20 and 21.

Claims 2, 7 and 8 are amended. Claims 5, 6 and 9 to 19 are canceled. New claims 20 to 22 are added. Claim 2 is amended to recite the first unit is the electromagnetic coil and the second unit is the core structure. Claim 7 is amended to depend upon claim 1 and to recite first unit is the core structure and the second unit is the electromagnetic coil. Claim 8 is amended to correspond to amendments to base claim 7 and to respond to the rejection under 35 U.S.C. 112. As amended claim 8 recites the first unit making this limitation clear. New claim 20 recites the supplemental top plate. New claim 21 corresponds to claim 8 except dependent upon claim 2.

The specification is objected to and claims 1 and 4 were objected to because the specification failed to provide proper antecedent basis for the subject matter of claims 1 and 4.

Claims 1 and 4 are properly described in the original application. The application states at page 6, lines 20 to 26:

"Electromagnetic coil structure 62 is affixed to cone 43 at the rear of cone 43. Representative strut 45 is indicated in phantom in FIG. 1 to avoid cluttering illustration of sensor apparatus 60. Electromagnetic coil structure 62 is preferably affixed with cone 42 using a wedge 68. Wedge 68 is preferably configured appropriately to cause electromagnetic coil 60 to responded to motion by cone 43 in directions substantially parallel with axis 22. Wedge 68 may be eliminated or altered from the described preferred configuration in mounting electromagnetic coil structure 62."

This disclosure of the original application clearly states that electromagnetic coil structure 62 is affixed to the rear of cone 43 and that wedge 68 is optional and preferred. This corresponds to language in claim 1 that the second unit is "mounted for movement

with said speaker cone." Thus claim 1 reciting connection to the cone without reciting the wedge and claim 4 reciting this connection via a wedge are both proper.

Claims 1 to 4 were rejected under 35 U.S.C. 103(a) as made obvious by the combination of Pulfrey U.S. Patent No. 5,493,620 and Saik et al U.S. Patent No. 4,312,118.

Claim 1 recites subject matter not made obvious by the combination of Pulfrey and Saik et al. Claim 1 recites the sensor device is mounted at "a position on said cone radially offset from said axis." The OFFICE ACTION cites: velocity sensing structure 40 of Pulfrey as making obvious the recited variable reluctance sensor device; annular cylindrical permanent magnet 28 of Pulfrey as making obvious the recited first unit; and voice coil 30 of Pulfrey as making obvious the second unit offset from the axis. Inspection of Figures 1 and 2 of Pulfrey makes clear that velocity sensing structure 40, annular cylindrical permanent magnet 28 and voice coil 30 are coaxial with cone 21. Thus Pulfrey fails to make obvious the "position on said cone radially offset from said axis" limitation. Accordingly, claim 1 is allowable over the combination of Pulfrey and Saik et al.

Claim 2 recites subject matter not made obvious by the combination of Pulfrey and Saik et al. Claim 2 recites "said first unit comprises a core structure; and wherein said second unit comprises a electromagnetic coil structure." The FINAL REJECTION states the Pulfrey as modified by Saik et al makes this limitation obvious. However, the FINAL REJECTION cites no portion of either Pulfrey or Saik et al as making obvious this limitation. Without citation of specific structure in the references, the rejection does not make a prima facie case of unobviousness because it presents no evidence. Accordingly claim 2 is not made obvious by the combination of Pulfrey and Saik et al.

Claim 3 recites subject matter not made obvious by the combination of Pulfrey and Saik et al. Claim 3 recites "said second unit is mounted at a substantially stationary node on said cone." The FINAL REJECTION states the Pulfrey as modified by Saik et al makes this limitation obvious. However, the FINAL REJECTION cites no portion of either Pulfrey or Saik et al as making obvious this limitation. Without citation of specific structure in the references, the rejection does not make a prima facie case of unobviousness because it presents no evidence. The Applicant submits that neither Pulfrey nor Saik et al include any teaching regarding a stationary node as taught in this application at page 7, lines 7 to 14. Accordingly claim 3 is not made obvious by the combination of Pulfrey and Saik et al.

Claim 4 recites subject matter not made obvious by the combination of Pulfrey and Saik et al. Claim 4 recites "said second unit is mounted on said cone using a wedge." The FINAL REJECTION states the Pulfrey as modified by Saik et al with OFFICIAL NOTICE that wedges are known in the art. However, the FINAL REJECTION cites no portion of either Pulfrey or Saik et al as making obvious this limitation. Without citation of specific structure in the references even with reference to OFFICIAL NOTICE, the rejection does not make a prima facie case of unobviousness because it presents no evidence. Accordingly claim 4 is not made obvious by the combination of Pulfrey and Saik et al.

Claim 7 was rejected under 35 U.S.C. 103(a) as made obvious by the combination of Pulfrey U.S. Patent No. 5,493,620, Saik et al U.S. Patent No. 4,312,118 and Joseph et al U.S. Patent No. 4,360,707.

Claim 7 recites subject matter not made obvious by the combination of Pulfrey and Saik et al. Claim 7 recites "said first unit comprises an electromagnetic coil structure; and wherein said second unit comprises a core structure." The FINAL REJECTION

states the Pulfrey as modified by Saik et al makes this limitation obvious. However, the FINAL REJECTION cites no portion of either Pulfrey or Saik et al as making obvious this limitation. Without citation of specific structure in the references, the rejection does not make a prima facie case of unobviousness because it presents no evidence. Accordingly claim 7 is not made obvious by the combination of Pulfrey and Saik et al.

The FINAL REJECTION stated that claim 8 would be allowable if rewritten independent of rejected base claims. As demonstrated above base claims 1, 2 and 7 are allowable. Accordingly claim 8 is allowable.

New claims 20 and 21 recite subject matter not made obvious by any combination of the references. Claim 20 recites a supplemental top plate for mounting the first unit not made obvious by any combination of the references. Claim 21 recites the "high pass filter having a corner frequency; and said predetermined input signal has a frequency substantially below said corner frequency" substantially the same as allowable claim 8.

The Applicants respectfully request entry and consideration of this amendment. Entry of this amendment is proper at this time because the amendment cancels rejected claims and the proposed amendments serve only to clarify subject matter previously recited. Thus no new search or reconsideration is required.

The Applicants respectfully submit that all the present claims are allowable for the reasons set forth above. Therefore early entry of this amendment, reconsideration and advance to issue are respectfully requested.

If the Examiner has any questions or other correspondence regarding this application, Applicants request that the Examiner contact Applicants' attorney at the below listed telephone number and address to facilitate prosecution.

Texas Instruments Incorporated
P.O. Box 655474 M/S 3999
Dallas, Texas 75265
(972) 917-5290
Fax: (972) 917-4418

Respectfully submitted,

/Robert D. Marshall, Jr./
Robert D. Marshall, Jr.
Reg. No. 28,527